

10/567514

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

1AP20 Rec'd PCT/PTO 07 FEB 2006

Applicant: Kiyoshi NISHIYAMA ) Group Art Unit:  
Serial No: ) Examiner:  
Filed: February 7, 2006 ) Attorney Docket No: 8840/96472 (P0737US)  
For: System Estimation Method and ) Confirmation No.  
Program, Recording Medium, and )  
System Estimation Device )

INFORMATION DISCLOSURE STATEMENT

**Mail Stop: Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Dear Sir:

The U.S. patents, published patent applications, patent abstracts, and publications listed below were located during a prior patent search of the above-identified application or cited in a related U.S. Patent Application or an International Search Report or in an International Preliminary Examination Report of a corresponding or related International Patent Application. The U.S. patents, published patent applications, patent abstracts, and publications listed below generally relate to the subject matter of the invention, but do not fairly teach or suggest the claimed System Estimation Method and Program, Recording Medium, and System Estimation Device. Copies of the listed U.S. patents, published patent applications, patent abstracts, and publications, as well as the International Search Report and the International Preliminary Examination Report of the corresponding International PCT Patent Application No. PCT/JP2004/011568 filed August 05, 2004, International Publication No. WO 2005/015737 A1 published February 17, 2005 are enclosed for the consideration of the U.S. Patent Examiner.

1. Hansen U.S. Patent No. 5,394,322 granted February 28, 1995 pertains to a Self-Tuning Controller That Extracts Process Model Characteristics.

2. Lo U.S. Patent No. 5,987,444 granted November 16, 1999 pertains to Robust Neutral Systems.

3. Wigren U.S. Patent No. 5,995,620 granted November 30, 1999 pertains to a Echo Canceller Having Kalman Filter For Optimal Adaptation.
4. Paré, Jr. U.S. Patent No. 6,711,598 granted March 23, 2004 pertains to a Method and System for Design and Implementation of Fixed-Point Filters for Control and Signal Processing.
5. Shah U.S. Patent No. 6,801,881 B1 granted October 5, 2004 pertains to a Method for Utilizing Waveform Relaxation in Computer-Based Simulation Models.
6. Patent Abstract: Nishiyama Japanese Publication No. JP 2002-135171 published May 10, 2002, Japanese Application No. 2000-323958 filed October 24, 2000 of Japan Science & Technology pertains to a System Identification Method.
7. Patent Abstract: Tanaka et al. Japanese Publication No. JP 07 - 185625 published July 25, 1995, Japanese Application No. 05-332691 filed December 27, 1993 of Nippon Steel Corp. pertains to a Control Method to Guarantee Minimum Plate Thickness of Hoop Steel Sheet.
8. Patent Abstract: Kobayashi et al. Japanese Publication No. 61-200713 published September 5, 1986, Japanese Application No. 60-041053, filed March 4, 1985, of OKI Electric Ind Co Ltd. pertains to a Digital Filter.
9. Patent Abstract: Eguchi et al. Japanese Publication No. 07-110693 published April 25, 1995, Japanese Application No. 05-255877, filed October 13, 1993, of Sharp Corp. pertains to a Method And Device For Active Control Using Lattice Type Filter.
10. Publication: "*Robust Estimation of a Single Complex Sinusoid In White Noise -  $H_\infty$  Filtering Approach*", by Kiyoshi Nishiyama, IEEE Transaction on Single Processing, Vol. 47, No. 10, October 1999.
11. Publication: " *$H_\infty$ -Learning of Layered Neural Networks*", by Nishiyama et al., IEEE Transactions on Neural Networks, Vol. 12, No. 6, November 2001.
12. Publication: "*Adaptive Filter Theory, Third Edition*" by Simon Haykin, Kalman Filters, Chap. 7, page 320-321, Prentice Hall Information and Sciences Series.

13. Publication: "*Indefinite-Quadratic Estimation and Control, A Unified Approach to  $H^2$  and  $H^\infty$  Theories*", by Hassibi et al., Studies in Applied and Numerical Mathematics, Chapter 1, pages 4-21.

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14. Publication: "*A State-Space Approach To Adaptive RLS Filtering*" by Ali H. Sayed and Thomas Kailath, published by IEEE Signal Processing Magazine, July 1994, pages 18-60.

15. Publication: "*A Fast Filter And Its Tracking Performance For Time-Varying System Identification*" by Kiyoshi NISHIYAMA of Dep. Of Comp & Info. Science, Faculty of Engineering, Iwate University, Japan, published by Proceeding of 15<sup>th</sup> Digital Signal Processing Symposium, pages 191-196, Iwate, Japan.

16. Publication: "Digital Signal Processing Handbook", 1993, pages 419-423 and 177-190.

17. PCT International Search Report mailed November 22, 2004, PCT/ISA/210,220, 237 for International PCT Patent Application No. PCT/JP2004/011568 filed August 05, 2004, International Publication No. WO 2005/015737 A1 published February 17, 2005.

18. PCT International Preliminary Examination Report of June 9, 2005, PCT/IPEA 401, 408, 409, 416 for International PCT Patent Application No. PCT/JP2004/011568 filed August 05, 2004, International Publication No. WO 2005/015737 A1 published February 17, 2005.

Authorization is hereby given to charge any fees in connection with this Information Disclosure Statement or any deficiency in fees or any other fees in connection with the subject application to our Deposit Account No. 23-0920.

Dated: February 7, 2006

Respectfully submitted,

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10/24/2001 W&K Substitute for Form PTO-SB/08A, which is a US PTO Substitute for form 1449A/PTO and 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/567514
		Filing Date	February 7, 2006
		First Named Inventor	Kiyoshi NISHIYAMA
		Group Art Unit	
		Primary Examiner Name	
Confirmation No.			
Sheet 1 of 1	Attorney Docket Number	8840/96472 (P0737US)	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	5,394,322	02-28-1995	Hansen	
	2	5,987,444	11-16-1999	Lo	
	3	5,995,620	11-30-1999	Wigren	
	4	6,711,598	03-23-2004	Paré, Jr.	
	5	6,801,881	10-05-2004	Shah	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	6	Japanese Patent Publication Application No. JP 2002-135171	05-10-2002	Japan Science & Technology		√
	7	Japanese Patent Publication Application No. JP 07 - 185625	07-25-1995	Nippon Steel Corp.		√
	8	Japanese Patent Publication Application No. JP 61-200713	09-05-1986	OKI Electric Ind Co Ltd.		√
	9	Japanese Patent Publication Application No. JP 07-110693	04-25-1995	Sharp Corp.		√

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	10	Publication: " <i>Robust Estimation of a Single Complex Sinusoid In White Noise - <math>H_{\infty}</math> Filtering Approach</i> ", by Kiyoshi Nishiyama, IEEE Transaction on Single Processing, Vol. 47, No. 10, October 1999.	√
	11	Publication: " <i><math>H_{\infty}</math>-Learning of Layered Neural Networks</i> ", by Nishiyama et al., IEEE Transactions on Nueral Networks, Vol. 12, No. 6, November 2001.	√
	12	Publication: " <i>Adaptive Filter Theory, Third Edition</i> " by Simon Haykin, Kalman Filters, Chap. 7, page 320-321, Prentice Hall Information and Sciences Series.	√
	13	Publication: " <i>Indefinite-Quadratic Estimation and Control, A Unified Approach to <math>H^2</math> and <math>H^{\infty}</math> Theories</i> ", by Hassibi et al., Studies in Applied and Numerical Mathematics, Chapter 1, pages 4-21.	
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Examiner Signature	Date Considered
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STATEMENT BY APPLICANT**

(use as many sheets as necessary)

**Complete if Known**

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First Named Inventor		Kiyoshi NISHIYAMA	
Group Art Unit		1AP20 Rec'd PCT/PTO	
Primary Examiner		07 FEB 2006	
Confirmation No.			
Sheet	2	of	1
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